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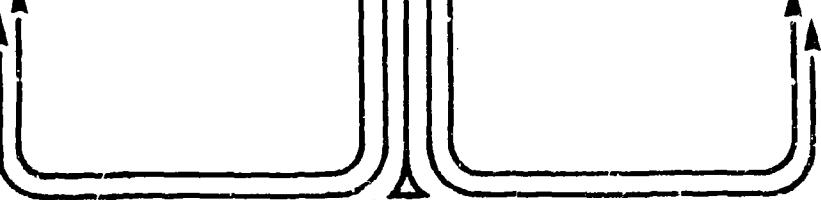


## STUDENT REPORT

AN APPLICATION IN THE  
PRINCIPLES OF WAR:  
THE SCHLIEFFEN PLAN

MAJOR JAMES A. GOODIN 84-1010  
"insights into tomorrow"

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THE SCHIEFFEN PLAN

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Submitted to the faculty in partial fulfillment of  
requirements for graduation.

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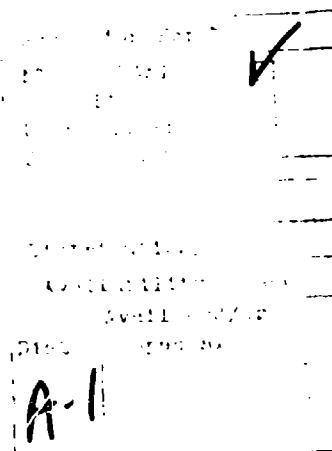
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The Schlieffen Plan was Germany's contingency plan for a two-front war with France and Russia at the outbreak of European hostilities in 1914. This project describes the war plans of Germany and the Allies and accounts the first 33 days of WW I, ending in a German retreat at the Battle of the Marne. From the opening campaign of WW I, this project draws examples for illustrating the principles of war (as defined in AFM 1-1). It also provides questions and discussion for a seminar environment.			

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## ABOUT THE AUTHOR

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Major James A. Goodin has earned a BS in Electrical Engineering from California State University at Long Beach and a MA in Industrial Management from Central Michigan University. Prior to enlisting in the Air Force in 1970, he was employed for five years by Rockwell Corp and Burroughs Corp as a draftsman, technical writer, and electrical engineer. Major Goodin was commissioned through Officer Training School in 1971, has completed Squadron Officer School (correspondence) and Air Command and Staff College (seminar), and is a member of the ACSC class of 1984. Following Undergraduate Navigator Training at Mather AFB, he was assigned as a squadron C-141 navigator from 1972-76 at Charleston AFB (MAC). While at Charleston, he held the crew qualifications of standardization/evaluation navigator, select-lead combat navigator, and Berlin Corridor flight examiner. Major Goodin was next assigned to Clark AB, RP, as life support officer in the 3TFW and life support advisor to 13 AF (PACAF). From 1978-1981 he was assigned to Space Division (AFSC), Los Angeles AFS, where he served as an electronic systems engineer, project officer, and branch chief in a satellite System Program Office. Major Goodin returned to navigating C-141 aircraft at Norton APB (MAC) from 1981-83. At Norton he also served as a wing tactics officer and planner of joint-service airdrop training and exercises. His military decorations include two Meritorious Service Medals, three Air Force Commendation Medals, and two Humanitarian Service Medals.



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## Chapter One

### INTRODUCTION

#### BACKGROUND

The Schlieffen Plan was Germany's contingency plan for a two-front war with France and Russia at the outbreak of European hostilities in 1914. Germany was concerned in the late 19th century with Russia undergoing a slow modernization of her 6.5 million-man army and with France using conscription to rebuild her army following the devastating loss of the Franco-Prussian War in 1870. The Franco-Prussian War was a pre-emptive war, sought by Germany, which was fought to a quick, decisive victory. Humiliating peace terms included a victory march through Paris for the German Army, annexation of the French provinces of Alsace and Lorraine to keep France forever on the defensive, and an indemnity of five billion francs intended to hobble France for a generation. (5:46) These concerns prompted the German General Staff to start preparation for a simultaneous war with France and Russia, Germany's worst-case scenario.

#### SIGNIFICANCE

The repulse of the opening German offensive by the Allies in 1914 was followed by four years of carnage, the result of which turned the world upside down. The monarchies in Germany, Russia,

Austria, and Turkey fell. The length of the war brought the Communist revolution in Russia. In victory, France and England were on the verge of bankruptcy, and the United States ended up a world power. The Schlieffen Plan called for a six-week victory in France, followed by another short victory in Russia. So, what happened?

#### PURPOSE

The purpose of this paper is to investigate just that point in the context of a principles of war application. This paper will describe a significant piece of military history, provide a backdrop for analyzing an application of the principles of war, and provide an ACSC seminar chairman the framework by which he or she can lead a guided discussion. The author hopes, that by overlaying the principles of war, as described in Air Force Manual 1-1, on the planning and conduct of this historic campaign, their validity will be confirmed.

#### OVERVIEW

The remaining chapters have been organized to facilitate the understanding of the applicable war plans, the conduct of the campaign, and the subsequent overlay of modern principles of war. Chapter Two, War Plans, describes the war plans of Germany, France, Russia, and England that were in effect at the outbreak of World War I. The first thirty-three days of the war, which ended in a German retreat, are accounted in Chapter Three, The War. Chapter Four, War Principles, contains a reproduction from AFM 1-1 of

each principle of war followed by a positive or negative application from the 33-day campaign. Chapter Five, Seminar Chairman Guidance, provides that information necessary for an ACSC seminar chairman to lead a guided discussion on the Schlieffen Plan's application of the principles of war.

## Chapter Two

### WAR PLANS

#### THE SCHLIEFFEN PLAN

The Schlieffen Plan started its evolution following the decisive Prussian victory over France in 1871. The problem to be solved was what Helmuth von Moltke, the Chief of the German General Staff, considered the worst-case military situation: a two-front war in which Germany faced France in the west and Russia in the east. This combination of forces was numerically superior to those of Germany although separated from one another. He had several plans during the next 18 years, but two events settled him on one plan. The first was that France built a fortress chain (Verdun, ou!, Epinal, Belfort) along the 150-mile frontier between Switzerland and the Alps on the south and the neutral countries of Belgium and Luxembourg on the north making a quick victory over France improbable (figure 1). The other was a German alliance with Austria adding additional strength on the Russian frontier. (2:119) Moltke's plan, then, called for a defensive action in the west behind the German fortresses falling back to the Rhine, if necessary, with a combined German and Austrian offense against Russia. His objective was a quick negotiated settlement with Russia and France, in-turn. (4:18-21) Moltke's plan remained intact until Alfred von Schlieffen became

Chief of the German General Staff in 1893.

Alfred von Schlieffen did not believe that a negotiated settlement was a proper objective of war. Schlieffen was a product of the German General Staff military training system and, as such, an avid student of military history. His studies in military history left Schlieffen with three convictions on war. First, modern war cannot be drawn out, because it ruins the highly developed industrial economy of the participants. Second, one cannot defeat the enemy without attacking him. Third, a real victory is achieved only by completely destroying the enemy's striking power. (4:47) Thus, Schlieffen and his successors/students could not envision fighting a war without the objective being total destruction and capitulation of the enemy military forces.

Schlieffen, then, could not be satisfied with Moltke's plan which had as its objective a negotiated settlement rather than the destruction of military forces. Schlieffen thought of war in terms of four fundamental principles which today are recognized as the Offensive, Maneuver, Mass, and Economy of Force. By aggressively taking the offensive and thus taking the initiative, Schlieffen believed that the enemy would have to conform to his battle plan. He believed that by maneuvering the mass of his own forces against the flanks of the enemy he would avoid the costly losses of frontal attacks against modern weapons and throw the opponent off balance forcing him to respond to the initiative. This mass maneuver was to be applied at a decisive point by exercising economy of force where the enemy could do the least

harm. His often quoted examples of inferior forces bringing superior strength against the flanks of a more numerous opponent in a double-envelopment movement were Hannibal (at Cannae, in 216 BC), Frederick the Great, Napoleon, and Schlieffen's predecessor Moltke. (2:134) On these principles he rethought the problem of a two-front war. His plan was not complete when an accident forced his retirement in 1906. He presented the plan to his successor in a memorandum and continued to modify it in retirement until his death in 1913. This plan became the basis for the operational plan with which the Germans entered WW I and is generally referred to as "the Schlieffen Plan".

Schlieffen wrote that "in a two-front war, the whole of Germany must throw itself upon the one enemy, the strongest, most powerful, most dangerous enemy and that can only be France." (5:35) The original (1905) Schlieffen Plan allocated six weeks and seven-eighths of Germany's forces to smash France while one-eighth was to hold her eastern frontier against Russia until the bulk of the army could be brought to face the second enemy. France was chosen first because Russia could frustrate a quick victory by simply withdrawing into the heart of Russia. France was both closer at hand and quicker to mobilize. The German and French Armies both required two weeks to complete mobilization before a major attack could begin on the fifteenth day. Russia, thought the German General Staff because of vast distances, huge numbers, and meager railroads, would take six weeks before she could launch a major offensive. By this time France could be beaten. (5:35) To insure

quick victory, Schlieffen could not rely on a frontal assault across the fortified French frontier. Instead, he planned to envelop the French Army from the north and west (left flank and rear) to ensure it did not escape to the south of France, and it would be destroyed in minimum time. In order to do this he planned for 90% (increased from 1905<sup>1</sup>) of his forces (71 divisions) to form the spoke of a wheel and rotate about the city of Metz, sweeping through "neutral" Belgium, crossing into France in a solid line from Lille to Metz, passing to the west of Paris, and sweeping the entire French Army and any English expeditionary force upon the rear of the fortified French-German border (figure 2). Twelve divisions would follow-up and hold Belgium. Five percent (10 divisions<sup>2</sup>) of the forces would fight a delaying action on the German border withdrawing to the Rhine as necessary. Another five percent (5 divisions), weakened since 1905 to place more troops in the right wing, would hold off the Russians in East Prussia, withdrawing to the Vistula River and conceding Prussian soil, if necessary, until the French were defeated and the bulk of the western army could move east. (2:138) There were two keys to this plan. First, success depended on speed and surprise of the German advance through Belgium. Schlieffen had to insure a sufficient supply of men and material to keep this powerful right wing on schedule. (4:57) The second key was Paris. This gigantic fortress needed to be isolated or eliminated, because it was the rallying point of all French reserves and the center of the entire French railway system. (4:60) Schlieffen called for a bold, audacious

maneuver which had the purpose of quick annihilation of the French Army, followed by rapid transfer of forces east to meet Russia.

Schlieffen's successor as Chief of the German General Staff, General von Moltke (Moltke, the younger), was more conservative and not as willing to concentrate all of his strength on one maneuver. He, consequently, weakened the German right wing using new forces as they became available and the reserves that Schlieffen had behind the right wing to reinforce the Russian front and the left wing on the German-French border. (2:140) This weakened Schlieffen's plan in two ways. First, obviously, it diluted the strength of the right wing, perhaps below the density of men required to maintain an offensive. Equally important, by strengthening the left wing he retarded the advancement of the French making it easier for them to move armies to support the French left when necessary. The result of Moltke's changes in the Schlieffen concept meant that when war came in 1914, the right wing contained only 65%, vice 95%, of the western army strength. Instead of being 90% of the mobilized strength of the entire German Army, as Schlieffen had recommended, it was only about 54%. (2:140)

#### FRENCH PLAN XVII

The French had prepared Plan XVII in the advent of war with Germany. Prior to 1912, Chief of the French General Staff Michel expected Germany to attack through Belgium and had planned to defend against such action. Michel was fired, and the new French plan called for an offense across the German frontier, initially retaking the provinces of Alsace and Lorraine lost to Germany in

in 1870-'71. (4:8) Plan XVII was titled an In ention to Attack. It called for an immediate and brutal offensive through Lorraine which would break the German center and throw the two wings asunder (figure 2). Details and planning were unimportant. Success was guaranteed by French Elan (spirit). "Elan was greater than bullets." (7:208) The plan had no objective since it was considered to be a response to German attack. Its motivating idea was to reach Berlin through Mainz. Its intention was inflexible: attack! The French, even though not defending an attack through Belgium, welcomed one. They thought that their two-pronged offensive would smash through the German center and left on either side of the fortified area at Metz and by victory would sever Germany's right wing, if any, from its base rendering it logistically unsupportable. (5:45-58) France did not believe that Germany had enough forces under arms to provide the troop density required for the envelopment maneuver, and German security prevented the French from knowing about the Schlieffen Plan.

#### THE RUSSIAN PLANS

The Russians had two contingency plans depending on whether Germany applied the bulk of its forces towards France or Russia. To support Plan XVII France wanted Russia to attack the German eastern front by the 15th day of mobilization to insure that Germany had to fight on two fronts from the start, keeping Germany from having superior numbers on the western front. The Russian's A-plan (for Austria) assumed that the first German attack would be against the West. In which case, the Russian main

forces (32 divisions) would attack Austria leaving 24 divisions to invade East Prussia (as far as the Vistula River in present-day Poland). The G-plan (for Germany) assumed that the main German deployment would be eastward. In this case Russia would abandon its occupation of Poland and deploy its main force in Belo-Russia in the fortified area north of the Pripyat marshes - a defensive strategy. Employment of either the A-plan or G-plan would then give Russia time to mobilize the remainder of her huge army.

The Russians could mobilize a total land force of 6.5 million men, but the widely held perception of the invincibility of the "steam roller" was a myth. It was the Russian winter, not their army that turned back Napoleon. They were defeated on their own soil by the French and British in the Crimea. They were outfought by the Turks in 1877, but eventually won with overwhelming numbers, and they had recently been outfought by the Japanese in Manchuria. (5:75) Thus, Germany was not as concerned with Russia as France.

#### THE ENGLISH PLAN

The English plan for intervention in a European war depended completely on popular support. England had no written treaties with France or Russia. Her only pertinent treaty was signed with all European powers guaranteeing Belgian neutrality. However, French and English general staffs performed joint planning in case of a German war. In 1911 the English staff committed to send seven divisions (150,000 men and 67,000 horses) for attachment to the French Army and protect the French left flank from

envelopment. (5:69) In 1912 the French-English Naval Pact called for the English Navy to safeguard the English Channel and French coasts from enemy attack, leaving the French fleet free to concentrate in the Mediterranean Sea. (5:92) These plans were classified and their existence known to only a few military officers. In the advent of hostilities, the military would have to inform the civilian government of the secret plans and rely on their approval prior to implementation.

## Chapter Three

### THE WAR

#### THE WAR BEGINS

Germany broke Belgian neutrality at the very start of hostilities. A complicated alliance system brought all of Europe's major powers to war in August 1914 over the 28 June assassination of Austria's crown prince in the Balkans. Austria resolved to end the long standing Slavic agitation in her empire once and for all. Austria pondered for four weeks over the proper course of action, while soliciting German assurance of backing in the advent of Russian intervention. Receiving assurances from Germany, Austria declared war on Serbia and on 29 July commenced a bombardment of Belgrade. Russia, in order to protect her prestige as the major Slav power, mobilized along her Austrian border. Standing up for the Balkan states, Russia then declared war on Austria, then Germany on Russia, then France on Germany. (1:36) In order to execute the Schlieffen Plan, Germany demanded that Belgium allow Germany to pass through enroute to France allowing use of standing Belgian transportation systems (roads, railroads) and communication systems. When Belgium refused, Germany declared war on Belgium, bringing England into the war. England probably would have entered the war anyway. She could not stand for an unfriendly force across the English Channel,

and she needed a balance of power on the continent, that a strong Germany threatened. Germany's breaking Belgian neutrality guaranteed by England, as well as all other European powers, though, brought the immediate popular support required for Parliament to back the war. (5:Ch 8,9)

As war became eminent, Germany started massing its armies along the Belgium-Luxembourg-France frontier (figure 2) in order to implement the Schlieffen Plan as modified by Moltke (the younger). The Germans assembled a force of 1.5 million men divided into seven armies along the western frontiers. The First, Second, and Third Armies composed the right wing that was to move through Belgium. They contained 34 divisions (640,000 men). The First Army, on the extreme right, was commanded by General von Kluck; and, having to travel the farthest, its pace would regulate the pace of the general advance. (2:136) The Fourth and Fifth Armies, composed of 20 divisions (400,000 men), formed the German center about which the right wing was to rotate. The Sixth and Seventh Armies, composed of 16 divisions (320,000 men), formed the German left flank and were to fight delaying actions in Alsace-Lorraine to hold up the French Army until the right wing envelopment would hit the French from the rear. (5:188) Nine divisions were placed in East Prussia to guard against Russia. The German right wing was to be initially unopposed as France implemented Plan XVII.

France massed its armies along the German frontier as prescribed in Plan XVII (figure 2). The French assembled slightly more than a million men in five armies along the German frontier.

The First and Second Armies (460,000 men), facing the German Sixth and Seventh in Alsace and Lorraine, formed the French right wing whose mission was to throw the Germans opposite them back to the Rhine while driving a wedge between the German left and center. The Third, Fourth, and Fifth Armies (600,000 men) were deployed north and north-east of Verdun for the great offensive through the German center as contemplated in Plan XVII. The Fifth Army on the left flank faced northeast for offense through southern Belgium, rather than facing north to meet a German attack descending through Belgium. The French were expecting a British Expeditionary Force to hold down their left flank. (5:207)

The majority of the British debate centered on the mission for British forces on the continent. The new British Secretary of State for War, Field Marshall Lord Kitchner, succeeded in limiting the force to four divisions (80,000 man) vice the seven divisions (150,000 men) agreed to in the joint planning efforts of the British and French military staffs. Lord Kitchner, alone amongst the leadership of all belligerents, was predicting a long war and required the rest of the British Army to train the new recruits that would be required. He appointed Field Marshall Sir John French as commander of this reduced British Expeditionary Force (BEF) with instructions to not unduly risk the BEF, to act independently, and not to come under orders of any allied general. (2:Ch 12) The British began embarkation four days after declaration of war.

With Belgium deciding to fight, Germany's first goal became the assault of the fortified cities of Liege and Namur, whose

guns covered the bridges crossing the Meuse River which had to be captured intact to allow the timely passage of the German armies. On 4 August the first German invaders crossed into Belgium. Cavalry units, as the vanguard of the invasion, were to reconnoiter the position of the Belgian and French armies, watch out for British landings and to screen the German deployment against similar enemy reconnaissance. On the first day, supported by infantry brought up in automobiles, they were to seize the crossings of the Meuse before the bridges could be destroyed and capture farms and villages as sources of food and forage. (5:196) Thus, the Schlieffen Plan was kicked off.

#### ADVANCE THROUGH BELGIUM

The 19-day German advance through Belgium closely adhered to the Schlieffen Plan. Technical advances that the Germans had been able to keep secret from the rest of the world helped maintain the schedule. Liege and Namur were both ringed with steel-reinforced concrete fortresses which were thought to be impervious to field artillery. The Germans, though had developed transportable field pieces that could only be rivaled by naval and coastal batteries. The forts, which covered important river crossings, were expected to hold for months; they fell in two weeks, seven days of which were used in moving the guns into place. (5:Ch 11) Though the Belgians destroyed many bridges and railroad tunnels, the Germans were able to maintain just enough logistical supply to supplement the right wing which was living off the land.

The armies kept moving. German security was exceptional.

The screening cavalry units prevented France from realizing the German force strength in Belgium. General Joffre, overall commander of the five French field armies, despite sending his own reconnaissance cavalry into Belgium, thought the German objective in Belgium was that of securing bridgeheads with minimum forces. (5:217) Consequently, on 7 August, Joffre attacked into Alsace with his First Army and, on 15 August, attacked Lorraine with his First and Second Armies. Belgium refused to place its field army of six divisions under French command, and after the fall of the Belgium fortresses the Belgians pulled back to Antwerp to save its forces from destruction. The English had landed in France and were cautiously moving into position on the French left flank. Between 20 and 24 August the whole western front was ablaze in four battles that engaged all seven German armies, the five French armies and the BEF. The battles were known collectively as the Battle of the Frontier and ended with the allies in retreat and Germany entering France in almost a solid front from Belgium on the north to Alsace on the east at the French-German-Switzerland border. Two of these battles, the Battle of Lorraine and the Battle of Mons, are worthy of further investigation because of the effect they had on the Schlieffen Plan.

The German action in Lorraine undermined the Schlieffen Plan even more gravely than the progressive reduction of the weight and role of the right wing. (3:171) The bulk of the French First and Second Armies marched across the frontier to be opposed by the German Sixth and Seventh Armies. The mission of these

German forces was to hold as many French on this front as possible, keeping them away from the right wing. They were to fall back, drawing the French forward into a sack. Their purpose was to tempt the French with tactical victory, then inflict strategic defeat. (5:235) After three days of retreating, Prince Rupprecht, in command of the Sixth Army, requested permission to turn and fight. Poor intelligence indicated that the French were not following the Germans into the sack. Rupprecht also argued that the successes of the siege guns in Belgium made the French fortresses less formidable. Rupprecht had a forceful personality and did not like his role of retreat; he argued that retreat was shameful for his troops who were requesting an attack. Moltke was undecisive and eventually yielded to the force of Rupprecht's personality.

The Sixth and Seventh Armies stopped retreating and made a frontal counter-attack, weakening the Schlieffen Plan several ways. First, the original plan called for releasing several divisions to the right wing after Germany retreated to defensible positions along the Rhine. A defending force can be smaller than an offensive force. Second, by putting the French on the defensive, the French required less men on this front and were free to release men to defend against the German right wing. Third, the right wing envelopment would work better the further east the French went. (5:246) After the initial success of the frontal attack, the German General Staff headquarters started thinking of a classic double envelopment which started to weaken the case for a strong right wing. (5:263)

At the Battle of Mons the German First Army opened a gap with the Second Army on their left that was to never be closed. The BEF had finally moved into position on the French left and had taken up positions on either side of Mons, Belgium. They were unknowingly placing themselves in the way of the brunt of the German right wing. Poor intelligence had the British believing that they faced at the most four German divisions. Actually they faced the eight infantry divisions and three cavalry divisions of von Kluck's First Army: 160,000 men with 600 guns compared to the BEF of 70,000 men with 300 guns. (5:288) The British had dug in and were prepared to blow bridges to slow German canal crossings, if necessary, in contrast to French tactics up to this time. The French thought that blowing bridges would hinder their offensive. They wouldn't even carry picks and shovels because digging-in might break the spirit of élan. (5:272) Von Kluck attacked the British positions with his center in a frontal attack, experiencing heavy casualties. The German First Army had marched 150 miles in 11 days, and the corps on each flank (one corps contained two divisions) were strung along roads several hours to the rear of the center two corps. Von Kluck realized his mistake, and halted the center to allow the flanks to advance even and then envelop the BEF for a battle of annihilation. The British, though, upon hearing that the French Fifth Army was withdrawing on their right, elected to break off from the Germans and withdraw, unaware of avoiding the envelopment. The Germans missed a great opportunity for neutralizing the British forces on the Continent, which were about to play a key role in stopping the Schlieffen

"Plan. The British fought a heroic disengagement, and von Kluck, pursuing in hope of envelopment, opened the gap between the German First and Second Armies.

#### ADVANCE INTO FRANCE

Like a swinging scythe the five German armies of the right wing and center cut into France from Belgium after the Battle of the Frontier. A million Germans were in the invading forces whose leading columns, shooting and burning, entered French territory on August 24. (5:381)

No breakthrough was made in Lorraine where the two armies under Prince Rupprecht continued to struggle in prolonged battle against the French resistance. General Joffre, now fully comprehending the magnitude of the threat from the German right wing, had his armies either engaged or retreating elsewhere. Joffre made two decisions that were to change the momentum of the war. First, he created a new Sixth Army, taken from the forces in Lorraine now engaged in defensive battle. This army he placed on his extreme left flank (to the left of the BEF), transferring them quickly by rail from one front to the other. The new French plan called for the Sixth Army, along with the BEF and the Fourth and Fifth Armies to form the mass that was to resume the offensive. (5:381) Second, he appointed General Gallieni, a veteran and POW from the Franco-Prussian War, to defend Paris. Gallieni accepted the position as Governor of Paris on the condition he be given six divisions to do the job. (5:389) As these two events were taking place, the German First, Second, and Third Armies were driving deep into France from the north with the BEF and French Fourth and Fifth Armies retreating before them. The

German Fourth and Fifth Armies had driven the French Third and Fourth Armies back with their right flank anchored by the fortress at Verdun. The German Sixth and Seventh Armies were stalled on the French-German frontier with the French First and Second Armies anchored by the French forts at Toul and Epinal. General von Kluck, on Germany's extreme right was thirty miles north of Paris. This was the 30th day since mobilization and the schedule called for victory over France between the 36th and 40th days.

#### GERMANY DEVIATES FROM SCHLIEFFEN PLAN

The German right wing stopped short of complete envelopment by turning east of Paris (figure 3). Von Kluck thought he was chasing a beaten opponent who was retreating in disorder as evidenced by jettisoned piles of coats, boots, and ammunition along the roads of retreat (F:44). Von Kluck needed reinforcements; he had left two divisions to guard his back from Antwerp, left a brigade in garrison at Brussels, and left various units to guard his ever increasing line of communications. Moltke had sent four divisions to the Russian front and the offensive action in Lorraine could not spare any divisions. Attrition had taken its toll as well. The right wing and left wing now numbered about the same: certainly not the 90:5 ratio originally required by von Schlieffen. Moltke was concerned about gaps in the battle line, especially between the First and Second Armies. Also, he thought the troop density had fallen below that required for offensive action; a sweep around Paris would stretch the front another 50 miles. Von Kluck was thus able to persuade Moltke that

the enemy could be defeated in the field before they could regroup. Thus, the German First Army turned east in pursuit of the BEF and the French Fifth Army, bypassing Paris.

#### BATTLE OF THE MARNE

France attacked the exposed German flank from Paris (figure 3). At this point Joffre's plan was for the whole western front to retreat south to the Seine River, then turn and fight. In pursuit, von Kluck had, against Moltke's orders, outmarched the Second Army on his left by two days. An intelligence coup on 2 September presented the French the opportunity to seize the initiative for the first time since they were thrown out of Alsace. Papers found on a dead German officer showed the lines of advance pointing in a southeast direction, bypassing Paris. Gallieni immediately verified von Kluck's turn with aerial reconnaissance from Paris. (5:452) Having never received his six divisions to defend Paris, Gallieni had commandeered the newly formed Sixth Army during the French retreat. He was the first French General to realize the opportunity being offered by von Kluck and seized the initiative. He coordinated a flank attack with the BEF, and he convinced Joffre to authorize the attack and to support it with a frontal attack with the Fourth and Fifth Armies. Moltke, alerted of impending danger by a transfer of four more French divisions from Lorraine, ordered the right wing to halt; the First Army (von Kluck) was to turn and face Paris, protecting the German right. Like most of Moltke's communications, this one took many hours to reach von Kluck, and his army was already on the march again in an effort

to roll up the French flank. He continued the march and advanced his headquarters another 25 miles. Moltke never visited the front nor personally met with his field commanders. Here again he dispatched a staff officer on the 175-mile drive from his Luxembourg headquarters to explain to von Kluck why he must stop the advance and retrace two days march. Von Kluck obeyed, and on 6 September sent four divisions north with the rest of his army to follow the next day. Quicker lines of communication gave Joffre the advantage, and he was able to coordinate and launch the attack this same day while von Kluck was out of position.

The Battle of the Marne had started. The German First Army was simultaneously engaged by the Sixth Army out of Paris on the west, the BEF from the southwest, and the Fifth Army from the southeast (figure 3). At this point of conflict only 13 German divisions were available against 27 Franco-British divisions. This highlights how the German right wing had been weakened both directly and indirectly. While German inferiority was due to subtraction of force from the right wing, the French superiority was due to the misguided action of the German left wing in Lorraine. (3:171) When von Kluck turned his First Army to meet the attack from Paris the gap reopened between the First and Second Armies. The key to the battle depended on whether Germany could crush the two wings of the Sixth Army and Ninth Army (another stopgap made from portions of the Third and Fourth Armies) before the Fifth Army and the BEF could exploit the gap and push through the center of the German right wing. The Sixth Army, when almost defeated by von Kluck, received 6000 replacements which were rushed from the

east by rail to Paris and sped to the front by 600 taxis. (5:485) Von Kluck withdrew to avoid a piercing of the German lines, ending the Battle of the Marne with a German retreat.

#### AFTERWARD

The German retreat at the Marne stopped the Schlieffen Plan and doomed the prospects of quick victory. Germany's opportunity to win the war was lost. The Schlieffen Plan had failed, but it had succeeded enough to leave the Germans in occupation of all of Belgium and northern France. France had lost her major coal and iron mines, wheat and sugarbeet areas, and one-sixth of her population. Also the industrial base of Belgium was lost to the Allies. German use of these resources were to keep her in the war four more years. (5:463) As the fighting dragged on, each side tried to strengthen its position outside of Europe. Accordingly the theater of war spread to many colonial areas as the British, French, and Portuguese overran the German colonies in Africa; and Japan, Australia, and New Zealand seized the German Pacific Ocean colonies. (1:40) The failure of the Schlieffen Plan destined the war to continue and drew in nations of both hemispheres in a true world war.

The consequences of failure of the Schlieffen Plan were immense and far reaching. To even the victors, with the exception of the United States, the war was devastating. Through the Battle of the Marne the German casualties (dead and wounded) were about 500,000: 550,000 for the French and 35,000 for the Russians. (2:30) When the war continued for four years of position warfare, the German

dead totaled 1,827,000 (12% of its men between the ages of 15 and 50). The French had 1,400,000 dead (14%). Austria-Hungary lost 1,350,000, Russia 2,000,000, and Great Britain 950,000. World War I accounted for 10 million dead and 20 million wounded. France and England spent 30% of their national wealth in victory. Four empires crumbled: the German, Austrian, Turkish and Russian. The Russian revolution and the emergence of Lenin and the socialist state were direct results of the long war. The United States, then, emerged from World War I as a world power. (1:45) The Schlieffen Plan was both too successful and not successful enough. Its 33-day success followed by its 11th-hour failure plunged the world into four years of devastating war that changed the world order.

## Chapter Four

### WAR PRINCIPLES

In this chapter each principle of war as defined in Air Force Manual 1-1 will be reproduced. The descriptions will be followed by positive or negative applications from the Schlieffen Plan, its execution, or the opposing allied forces. AFM 1-1 introduces the principles of war as follows:

The principles of war represent generally accepted major truths which have been proven successful in the art and science of conducting war. Warfighting is an extremely complex activity involving differing circumstances and uncertainties. As a result, the relative importance among the warfighting principles will vary with the situation. The following section discusses warfighting principles that have demonstrated to be successful in past military operations and, if disregarded, would presage a high degree of risk and possible failure in future military actions. (9:2.4)

### OBJECTIVE

The most basic principle for success in any military operation is a clear and concise statement of a realistic objective. The objective defines what the military action intends to accomplish and normally describes the nature and scope of an operation. An objective may vary from the overall objective of a broad military operation to the detailed objective of a specific attack. The ultimate military objective of war is to neutralize or destroy the enemy's armed forces and his will to fight. However, the intimate bond which ties war to politics cannot be ignored. War is a means to achieving a political objective and must never be considered apart from the political end. Consequently, political imperatives shape and define military objectives. It follows that the objective of each military operation must contribute to the overall political objective. (9:2-4)

## Germany

Germany, in both plan and execution, had a clear and concise statement of objective: quick and certain destruction and capitulation of the French Army. Whether or not the plan was realistic has been the subject of debate for 70 years\*; consequently, it can be safely stated that the plan was not completely unrealistic. From the overall objective came the strategy of enveloping the bulk of the French armies and the tactics of the individual armies; i.e., the armies of the right wing living off the land and Sixth and Seventh Armies luring the French away from the lopsided right wing. Most criticism stems from the areas of logistic support (which is covered separately) and of overlooking political consequences.

A major criticism of the Schlieffen Plan, is the political insensitivity of the strategy. War is a means to achieving political end with political imperatives shaping military objectives. (9:2-4) Von Schlieffen wrongly assumed that Belgium would not oppose a German invasion and did not account for the effect it had on bringing Britain immediately into the war. (4:93) Without the breaking of Belgium neutrality, the BEF may not have landed on the continent until it was too late to effect the outcome. Not only was the Schlieffen Plan politically insensitive, but its strategy may not have been fully understood.

\*Japuy and Tuchman argue that the Schlieffen plan was feasible, but Moltke (the younger) misused and weakened it to unsuccessfully; while Ritter, Siem-chang, Flammer, Liddell Hart and Van Creveld believe that the Schlieffen Plan, itself, was flawed and doomed to failure. (See Bibliography)

The German commanders did not seem to fully comprehend the overall objective and strategies of the Schlieffen Plan. It was when Prince Rupprecht argued to halt the retreat in Lorraine and General von Kluck convinced Moltke to bypass Paris that the plan started to crumble. Achieving the objective depended on the execution of the strategy and the proper application of the tactics. Germany had a clear and concise statement of objective that was not completely unrealistic. However, this objective was not fully understood by all commanders, and it did not fully account for political consequences.

#### France

Conversely, the French Plan XVII had no realistic objective. According to Liddell Hart,

... notorious Plan XVII. This was purely a direct approach in the form of a headlong offensive against the German center with all forces united. Yet, for this frontal and whole-front offensive, the French plan counted upon having a bare equality of strength against an enemy who would have the support of his own fortified support zone - while, rushing forward, the French forewore any advantage from their own.  
(3:157-168)

The French plan had no stated objective, just a vague notion of marching on Berlin; consequently, no strategy nor supporting tactics were developed.

#### OFFENSIVE

Unless offensive action is initiated, military victory is seldom possible. The principle of offensive is to act rather than react. The offensive enables commanders to select priorities of attack, as well as the time, place, and weaponry necessary to achieve objectives.  
(9:2-5)

### Germany

Because of his timetable, von Schlieffen had to control the action: capture and exploit the initiative. He could not wait for the enemy to choose to fight. Obtaining and maintaining the offensive was thus a key principle that drove the Schlieffen Plan. The various phases that the plan went through were all attempts to find a plan that would continue to press the offensive. In a memorandum during the preliminary stages of the Schlieffen Plan von Schlieffen wrote,

To win, we must endeavor to be the stronger of the two at the point of impact. Our only hope of this lies in making our own choice of operations, not waiting passively for whatever the enemy chooses for us. (4:38)

Von Schlieffen used the principle of offensive in conjunction with maneuver, mass, and economy of force.

### France

The French also thought of the offensive as a dominate principle of war. Plan XVII called for large doses of offensive action and cohesion to the detriment of surprise, mass and maneuver. To eliminate the elements of ignorance and chance that came from Clausewitz' "fog of war" at the beginning of conflict, they chose immediate offense rather than waiting for the fog to clear. A French General Staff officer put it this way. "It is the quickness with which we engage the enemy that guarantees us against surprise and the force of the attack which secures us against the enemy's maneuvers." (7:209) It was this preoccupation with offensive action that led the French not to issue trenching tools to their soldiers during the first month of the war. (5:272) During

the Battle of the Frontier the insistence on infantry attack into fierce machine gun and artillery fire needlessly killed thousands of soldiers. The French weighed the principle of offensive too heavily in comparison to the other principles.

#### SURPRISE

Surprise is the attack of an enemy at a time, place, and manner for which the enemy is neither prepared nor expecting an attack. The principle of surprise is achieved when an enemy is unable to react effectively to an attack. Surprise is achieved through security, deception, audacity, originality, and timely execution. Surprise can decisively shift the balance of power. Surprise given attacking forces the advantage of seizing the initiative while forcing the enemy to react. When other factors influencing the conduct of war are unfavorable, surprise may be the key element in achieving the objective. The execution of surprise attacks can often reverse the military situation, generate opportunities for ... forces to seize the offensive, and disrupt the cohesion and fighting effectiveness of enemy forces. (9:2-5)

#### Germany

Success of the Schlieffen Plan depended on the speed and surprise of the German advance through Belgium. (4:57) This statement is almost redundant, since the purpose of speed was to surprise the French with the envelopment maneuver while they were still facing east with an exposed left flank. The French were surprised, because they did not believe that the Germans had the force strength to accomplish such a grandiose maneuver. The German surprise was that they held no divisions in reserve, incorporating their reserve soldiers within active units creating super divisions. (3:169) The French definitely were not prepared for nor expecting an attack from the north through Belgium,

especially with the speed that the Germans accomplished it. This speed was hastened by the success of capturing the fortified towns of Liege and Namur. The world was surprised when the Germans had field artillery that could pierce the fortifications. They were attacked in a manner completely unexpected. The Schlieffen Plan called for attacking France at a time, place, and manner where they were neither prepared nor expecting an attack.

#### France

Plan XVII shunned the principle of surprise. No one was surprised when their first offensives of the war were attempts to retake the provinces of Alsace and Lorraine lost to Germany in 1871. The French paid in heavy casualties as these frontal assaults on fortified positions met heavy machine gun and artillery fire head on. France initially attacked Germany at a time, place, and manner that was expected.

#### SECURITY

Security protects friendly military operations from enemy activities which could hamper or defeat ... forces. Security is taking continuous, positive measures to prevent surprise and preserve freedom of action. Security involves active and passive defensive measures and the denial of useful information to an enemy. To deny an enemy knowledge of friendly capabilities and actions requires a concerted effort in both peace and war. Security protects friendly forces from an effective enemy attack through defensive operations and by masking the location, strength, and intentions of friendly forces. (9:2-5)

#### Germany

Security is a necessary element of surprise, and German security before the war and during its initial stages was out-

standing. The French did not believe the few rumors that they heard of the Schlieffen Plan. Neither did the French know the disposition of the German forces nor of the success in developing the capability to transport the large siege guns. The German cavalry was used to screen the main force as it moved through Belgium. When the French sent their own cavalry to Belgium to scout the disposition of German forces, the German cavalry screened the French to grossly underestimate the size of the main German force. The Germans effectively masked the location, strength, and intentions of their armies in Belgium.

#### Allies

Security also involves denial of useful information to the enemy. Nothing caused the Germans more trouble when operating in hostile territory than communications problems. In this area the Allies actively denied information to the Germans. The Belgians cut telephone and telegraph wires. The French, using a powerful transmitter on top of the Eiffel Tower, jammed the airwaves such that messages had to be transmitted three or four times. They thus cut communications between German units, between the units and division, corps and army headquarters, and back to the German General Staff headquarters in Luxembourg. Much of the time at German General Staff Headquarters there was an eight- to twelve-hour backlog in message traffic. (5:242) The Allies were successful in denying useful, timely information to the Germans.

### MASS AND ECONOMY OF FORCE

Success in achieving objectives ... requires a proper balance between the principles of mass and economy of force. Concentrated firepower can overwhelm enemy defenses and secure an objective at the right time and place .... The impact of these attacks can break the enemy's defenses, disrupt his plan of attack, destroy the cohesion of his forces, produce the psychological shock that may thwart a critical enemy thrust, or create an opportunity for friendly forces to seize the offensive. Concurrently, using economy of force permits a commander to execute attacks with appropriate mass at the critical time and place without wasting resources on secondary objectives. War will always involve the determination of priorities. The difficulty in determining these priorities is directly proportional to the capabilities and actions of the enemy and the combat environment. (9:2-6)

#### Germany

Mass and economy of force were guiding principles used by von Schlieffen in formulating his plan. In 1901 he wrote,

Necessity compels us to think of a way in which to conquer with numerically weaker forces. There is no panacea, not just one schema, but one idea seems to be well founded: If one is too weak to attack the whole, one should attack a section. There are many variations of this. One section of the enemy's army is its wing, and consequently one should attack a wing. (8:88)

He wanted to maneuver the mass of his forces against the flank of his enemy, thus achieving numerical superiority at the point of contact and avoid the costly losses of frontal attacks against modern weapons. This mass maneuver was to be applied at the decisive point by exercising concentrated force where the enemy could do the least harm. Von Schlieffen's dying words were reported to have been: "It must come to a fight. Only make the right wing strong." (4:8)

Even with Moltke's modification of the plan, Germany obtained

numerical superiority with the right wing until the Battle of the Marne. During the Battle of the Frontiers Germany had an overall 1½ to 1 advantage with the advantage being 2 to 1 in the extreme right wing. (5:277) Germany, however, was never able to use this advantage to apply a knockout blow. A good example being the better than 2 to 1 advantage the Germans had over the British at Mons. Poor execution denied Germany the chance to exploit the situation; they were never able to apply the bulk of their forces against the British who escaped to fight again at the Marne.

Liddell Hart believed that the Schlieffen Plan actually violated the principle of mass. By violating Belgian neutrality Germany brought the Belgians and British armies into the field against them, negating any numerical advantage the maneuver gave them over the French. (4:7)

#### Allies

The Allies were not able to win a battle until they were able to exploit the principles of mass and economy of force. All through the month of August, 1914, the Allies were never able to apply mass and economy of force. When finally on 5 September at the Marne they were able to do so, they achieved a victory. They attacked the 13 divisions of the German First Army, which was out of position and unsupported on their left, with 27 French and British divisions. They were able to execute an attack with appropriate mass at a critical time and place and in doing so disrupted Germany's plan of attack and thwarted her thrust.

### MANEUVER

War is a complex interaction of moves and counter-moves. Maneuver is the movement of friendly forces in relation to enemy forces. Commanders seek to maneuver their strengths selectively against an enemy's weakness while avoiding engagements with forces of superior strength. Effective use of maneuver can maintain the initiative, dictate the terms of engagement, retain security, and position forces at the right time and place to execute surprise attacks. Maneuver permits rapid massing of combat power and effective disengagement of forces. While maneuver is essential, it is not without risk. Moving large forces may lead to loss of cohesion and control.

(9:2-6)

### Germany

A basic premise in the Schlieffen Plan was to maneuver the bulk of the German Army against the French flank. The wheel maneuver through Belgium was necessary because the 150-mile Franco-German frontier could not accommodate the maneuver of mass armies. (3:167) Maneuver, with offensive, mass, and economy of force, was a fundamental principle of war recognized by the German General Staff. With Belgium destroying the rails in their country, the German pace of maneuver was set by the foot soldier (25 miles per day). France, on the other hand, was able to transport armies back and forth on the chord of a circle by rail. (4:6,7) Germany would have to travel the circumference of this same circle to reinforce the right wing (figure 3). While the whole premise of the Schlieffen Plan was maneuver, the French were more able to exploit this principle.

### France

During the first 13 days of the war, the best example of

maneuver was France transferring forces from the German frontier to outside Paris to meet the German right wing at the Marne. First they shifted six divisions (approximately 120,000 men) to form the French Sixth Army. On the eve of the Battle of the Marne, France shifted six more divisions to form the Ninth Army as a stop-gap between the Fourth and Fifth Armies. As the Sixth Army was going down in defeat, France shifted another 6000 replacements from the east to Paris by rail. From Paris 600 taxis, making two trips each, sped the reinforcements to the front in time to turn the battle. (5:485) France had used the principle of maneuver during the Battle of the Marne to hand Germany her first defeat.

#### TIMING AND TEMPO

Timing and tempo is the principle of executing military operations at a point in time and at a rate which optimizes the use of friendly forces and which inhibits or denies the effectiveness of enemy forces. The purpose is to dominate the action, to remain unpredictable, and to create uncertainty in the mind of the enemy. Commanders seek to influence the timing and tempo of military actions by seizing the initiative and operating beyond the enemy's ability to react effectively. Controlling the action may require a mix of surprise, security, mass, and maneuver to take advantage of emerging and fleeting opportunities. Consequently, attacks against an enemy must be executed at a time, frequency, and intensity that will do the most to achieve objectives (9:2-6).

#### Germany

Von Kluck's First Army attempted to use timing and tempo to maintain the initiative and dominate the action when they arrived 30 miles north of Paris while in pursuit of the BEF and French Fifth Army. The Allies were now expecting Germany to attack Paris, which was what the Schlieffen Plan also prescribed. As France was

preparing to defend Paris, von Kluck deviated from the Schlieffen Plan by turning away from Paris to pursue retreating forces in an attempt to keep the retreating armies reacting to the German initiative, limiting their effectiveness. Von Kluck, however, lost the surprise and consequently the timing and tempo through the security lapse of leaving a dead officer to be found with the new plan on his body.

#### France

It was at this point that General Gallieni utilized the principle of timing and tempo to seize the initiative through a mix of surprise, security, mass, and maneuver. Given the opportunity offered by the intelligence coup, he used the Paris forces to attack von Kluck on the flank. This unpredictable attack gave the retreating French forces the opportunity to act, rather than react. The retreating forces were able to turn and coordinate an offensive in conjunction with Gallieni and hand Germany their first defeat of the war and stop the momentum (timing and tempo) of the Schlieffen Plan.

#### UNITY OF COMMAND

Unity of command is the principle of vesting appropriate authority and responsibility in a single commander to effect unity of effort in carrying out an assigned task. Unity of command provides for the effective exercise of leadership and power of decision over assigned forces for the purpose of achieving a common objective. Unity of command obtains unity of effort by the coordinated action of all forces toward a common goal. While coordination may be attained by cooperation, it is best achieved by giving a single commander full authority.  
(9:2-6)

### Germany

Along with logistics, the principle of unity of command was most overlooked by the Schlieffen Plan. General Moltke as Chief of the General Staff allowed his span of control to become excessive. From his headquarters in Germany and then in Luxembourg he maintained personal control of the seven individual armies on the western front as well as the German forces in east Europe. For a while he made General von Bulow, commander of the center army of the three right wing armies, in command of the entire right wing. But von Kluck, in command of the extreme outside army and setting the pace, objected, and Moltke returned all commanders to equal status. This meant that coordinated action must be maintained by cooperation between the commanders. This cooperation broke down several times, best evidenced by von Kluck outmarching his neighboring armies by two days on the eve of the Marne, exposing both flanks to allied attack. Moltke attempted to maintain supreme command of the right wing from his headquarters but never once visited the front or his army commanders in Belgium or France. When communications broke down as they most often did, he would send his General Staff intelligence officer, Lt Col Hentsch, on the 175-mile journey with instructions. It was Lt Col Hentsch, as a representative of the General Staff, who ordered General von Kluck to withdraw during the Battle of the Marne. Germany could have been better served with an on-scene, supreme right wing commander.

### Allies

The Allies did not have a single, supreme commander during the first month of the war. The French, English, and Belgians were all fighting individual uncoordinated actions against the Germans. In referring to Lord Kitchner's instructions to Field Marshal French not to place the BEF under orders of any allied general, Tuchman states, "At one stroke Kitchner had canceled the principle of unity of command." (5:233) Not only the British, but the Belgians were also reluctant to place their forces under French command. During the early days of the war, the days of *élan*, this was a wise policy. Both forces could have been annihilated. The coordination lost by not having a single allied commander, though, is illustrated by the British and French fighting separate uncoordinated actions one day and thirty miles apart in Belgium. Also, a single allied commander may have had the Belgians attack the German right wing from the rear during the Battle of the Marne. Such coordinated action may have been decisive and shortened the war by four years.

### SIMPLICITY

To achieve a unity of effort toward a common goal, guidance must be quick, clear, and concise -- it must have simplicity. Simplicity promotes understanding, reduces confusion, and permits ease of execution in the intense and uncertain environment of combat. Simplicity adds to the cohesion of a force by providing unambiguous guidance that fosters a clear understanding of expected actions. Simplicity is an important ingredient in achieving victory, and it must pervade all levels of a military operation. Extensive and meticulous preparation in peacetime enhances the simplicity of an operation during the confusion and friction of wartime. Command structures, strategies,

plans, tactics, and procedures must all be clear, simple, and unencumbered to permit ease of execution.  
(9:2-7)

#### Germany

If anything, the Schlieffen Plan was complex. It pushed the state of the art in communications and logistics. The coordination required to implement a plan with a field army of 1.5 million men proved more than the German General Staff expected. They prepared as well as any country in the world at the time with annual war games and "staff rides." (Staff rides were annual events where the General Staff, under tutelage of their Chief, covered the terrain of their frontiers on horseback discussing strategy and tactics.) However, when war came and their communications were sabotaged and jammed, their officers, trained for initiative and independent action, took uncoordinated actions that jeopardized the overall strategy: examples being General von Kluck at the Marne and Prince Rupprecht in Lorraine. The Schlieffen Plan was not clear enough nor simple enough to permit the German commanders ease of execution.

#### France

If not well founded, at least Plan XVII was simple. It called for only initiative and attack. There was no mention in the plan of logistics or firepower. (5:51) Since extensive and meticulous preparation prior to the war was clearly missing, the French would surely have had worse communications and logistics problems than the Germans had their plan not collapsed so early.

### COHESION

Cohesion is the principle of establishing and maintaining the warfighting spirit and capability of a force to win. Cohesion is the cement that holds a unit together through the trials of combat and is critical to the fighting effectiveness of a force. Throughout military experience, cohesive forces have generally achieved victory, while disjointed efforts have usually met defeat. Cohesion depends directly on the spirit a leader inspires in his people, the shared experiences of a force in training or combat, and the sustained operational capability of a force. (9:2-8)

### France

As might be expected, the one outstanding example of cohesion from the first days of WW I would be French. The basic reason for German failure at the Marne was, said von Kluck afterward,

... the extraordinary and peculiar aptitude of the French soldier to recover quickly. That men will let themselves be killed where they stand, that is a well-known thing and counted on in every plan of battle. But that men who have retreated for ten days, sleeping on the ground and half dead with fatigue, should be able to take up their guns and attack when the bugle sounds, is a thing on which we never counted. It is possibly not studied in our war academy. (5:485)

Wrote Moltke during the Battle of the Marne, "French élan, just when it is on the point of being extinguished, flares up powerfully." (5:485)

### LOGISTICS

Logistics is the principle of sustaining both man and machine in combat. Logistics is the principle of obtaining, moving, and maintaining warfighting potential. Success in warfare depends on getting sufficient men and machines in the right position at the right time. This requires a simple, secure, and flexible logistics system to be an integral part of an ... operation. Regardless of the scope and nature of a military operation, logistics is

one principle that must always be given attention. Logistics can limit the extent of an operation or permit the attainment of objectives. (9:2-7)

### Germany

Logistics was the principle of war most overlooked in the Schlieffen Plan. Although it is well documented (5:403, 445; 4:46; 3:172) that the German right wing arrived at the Marne exhausted and hungry, the fact is that they were still in fighting condition. Von Kluck's army, which traveled the farthest, was winning the battle on their flank until overwhelmed by superior numbers. There is little evidence of severe shortages to this point. It was ten days following the Battle of the Marne that the Germans were first required to conserve ammunition. (6:128) The lands of Belgium and France that the right wing traversed were so bountiful that it was only rarely that the German soldiers resorted to the canned rations they carried. (6:124) This is not to imply that there were no logistics problems. Martin von Creveld, in his extensive study of the railroads, railheads, collateral transportation, and German army consumption, concludes that even if the Germans had won at the Marne the advance would have pattered out due to supply problems. (6: Ch 4)

The mobility of armies had declined relative to their bulk in the years prior to WW I. While the right wing averaged 16 miles a day and on some days advanced 25 miles (5:403), the German supply system was only capable of advancing 12 miles a day beyond the railheads. (6:117) The German General Staff who took a decade to work out details of the operational plan were aware of potential logistics

problems but hoped that they would not surface in a short war. They planned to feed the men and horses as much as possible off the countryside, transport as many supplies as far as possible, and win the war before serious logistics problems surfaced.

The Germans enjoyed a success beyond the limitations of the Schlieffen Plan. The marching distances covered were well beyond that thought possible in peacetime. The countryside was rich due to the season of year being the most bountiful. While rail lines were heavily damaged, those behind the First and Second Armies (who traveled the farthest) were less so. Food was obtained from the country, horses went unfed until they died, and ammunition arrived in adequate quantities. But by the time the right wing reached the Marne only the First Army was within support distance of a railhead. However, in August and September no German unit lost any engagements due to material shortages. (6:139-140)

Even so, had the Germans won the Battle of the Marne they would not have been able to continue. The railheads would not have been able to keep up with the advance; there would have been no fodder for the horses (required to move supplies and artillery), and the right wing armies (with no reserves available) were exhausted. (6:140) That shortly after the Battle of the Marne the war evolved to trench warfare, from permanently fixed lines, demonstrates that during WW I transport systems had not kept up with war operations.

## Chapter Five

### SEMINAR CHAIRMAN GUIDANCE

#### NOTES FOR SEMINAR CHAIRMAN

This chapter provides a series of questions and accompanying discussion to enable a seminar leader to lead a guided discussion on the Schlieffen Plan's application of the principles of war. The objective of this seminar is dual purpose. First, we want the course officers to gain an understanding of a significant bit of military history. Second, we want them to use the opening campaign of WW I as a model to illustrate and analyze the principles of war. As seminar chairman, you will want to review that section of AFM 1-1 pertaining to the principles of war and the attached narrative on the Schlieffen Plan to prepare for leading the seminar discussion.

#### SEMINAR DISCUSSION QUESTIONS

##### 1. Lead Off Question

Objective has been called the "principle" principle. Did the Schlieffen Plan contain a "clear and concise statement of a realistic objective?"

##### Discussion

AFM 1-1 describes the ultimate military objective of a war, "to neutralize or destroy the enemy's armed forces and his will to fight." This coincides with Germany's objective of quick and

certain destruction and capitulation of the French Army.

Follow Up Question

How does this compare to France? Did the French have a "clear and concise statement of a realistic objective" at the outbreak of hostilities?

Discussion

The French had no military objective. They omitted defining a military objective and proceeded to define a military strategy: the strategy of offense. The poor results that the French achieved at the onset of the war reflect their lack of objective. At first they attacked Germany in Alsace-Lorraine, then southern Belgium, followed by a campaign into central Belgium to meet the German right wing. All of these offensives resulted in defeat, resulting in full retreat for France at the end of the first month's conflict.

2. Lead Off Question

Which principles of war did the Schlieffen Plan exploit to best advantage?

Discussion

The Schlieffen Plan best utilized the principles of offensive, surprise, security, mass and economy of force, and timing and tempo. The Germans used offensive to maintain the timing and tempo. During the first month of the war, the Germans pressed the offensive and kept the French in a reactionary mode, never allowing the French to select the time, place, and weaponry of an engagement. The Germans utilized security to maintain the surprise. They were able to move over one million men through Belgium without the

French knowing their troop strength, surprise the French left flank, and force them into retreat. The strategy of the Schlieffen Plan was to apply the mass of the German Army against the French flank, while maintaining only those forces necessary on the left flank to prevent a French breakthrough. In this the Germans were able to maintain a decided manpower advantage until poor execution presented a weak German force to the more numerous Allies at the Battle of the Marne.

Follow Up Question

Which principles of war did the Germans overlook to their detriment?

Discussion

Neglect of the principles of unity of command and logistics may have cost Germany the quick victory necessary to win the war. Germany needed a single commander for the three right wing armies. General Moltke tried to control them from 175 miles behind the front, while at the same time commanding the armies of the left wing and the Russian front. There was too much competition and strife between the three right wing army commanders to obtain the cooperation required for coordinated effort. The Germans hoped that logistics would take care of itself in a short war. Logistics, however, is one principle that must always be given attention. The German General Staff spent ten years on the operational plan; that they had no comprehensive logistics plan was negligent. That they lost no battles through the Battle of the Marne for lack of logistics was due to good luck resulting from the time of the year that the plan kicked off. As it was, they had reached the end of

their supply line at the Marne and couldn't have pressed the campaign to a favorable German conclusion.

Follow Up Question

Which principle of war did the French exploit to best advantage?

Discussion

The French utilized the principles of cohesion and maneuver to seize the timing and tempo at the Battle of the Marne. The French never panicked during their ten-day retreat. When so ordered, the French armies were able to turn around and defeat the Germans at the Marne. The French used maneuver to position the armies at the right time and place to execute a surprise attack at the Marne. They used their railway system to its best advantage as they transferred numerous divisions from the German frontier to Paris to engage the German right wing.

Follow Up Question

Which principles of war did the French misuse?

Discussion

At the onset of the war, the French overemphasized the principle of offensive to the detriment of surprise, mass, and maneuver. They were so preoccupied with the offensive that their initial attacks into Alsace and Lorraine were where the Germans most expected them. They never attempted to maneuver their forces to seek numerical or tactical advantage. They sought to fight on a wide front rather than grouping forces to attack a German weak point.

### 3. Lead Off Question

Have any principles of war gained in relative importance from 1914 Europe to contemporary military operations?

#### Discussion

This is an open-ended question with no set answer. You might get an answer that suggests unity of command takes on greater importance in the joint arena. Having to coordinate joint actions with the Army, Navy, and Air Force taxes the limits of cooperation and necessitates a single unified commander. Or you might hear that since airpower can exploit a weakness much faster than a land army, security takes on additional importance. Or that a technology based military is much more logistics dependent than military forces of the past. The purpose of this question is to stimulate thought and discussion. As seminar chairman, you can validate responses.

#### Follow Up Question

What lessons can we learn from a principles of war analysis of the opening German campaign of WW I?

#### Discussion

Open-ended, but one point stands out; when planning and executing a campaign, all aspects of the art and science of conducting war must be given attention. The Germans placed emphasis on having a clear and concise objective, on offensive and timing and tempo, on security and surprise, and on mass and economy of force; but these aspects were only able to carry them for one month. As the campaign protracted, the de-emphasis that

the Germans placed on logistics, simplicity, and unity of command surfaced. While these were not formal principles of war recognized by the German General Staff, it is clear their neglect led to the German defeat at the Marne. Consequently, we should all remember to investigate all aspects of an operation during both its planning and execution.

Follow Up Question

What about the Allies? Can we learn anything from the way the Allies conducted the opening days of WW I?

Discussion

This question is also open-ended. One possible answer concerns the Allies' planning and executing the Battle of the Marne. The Allies certainly did not use a "principles of war" checklist, nor is there any evidence that any of the commanders consciously thought in terms of modern principles when planning the battle. However, it has to be more than just coincidence that the first time in the campaign that the conditions were right and properly exploited, the allies did indeed unconsciously apply all of our modern principles of war and won their first battle. The objective of the Allied counterattack at the Marne is fuzzy, but the seminar should be able to give an explicit example of proper exploitation for each of the other war principles in this battle. The Battle of the Marne is an example of a past military operation where proper use of warfighting principles proved successful.

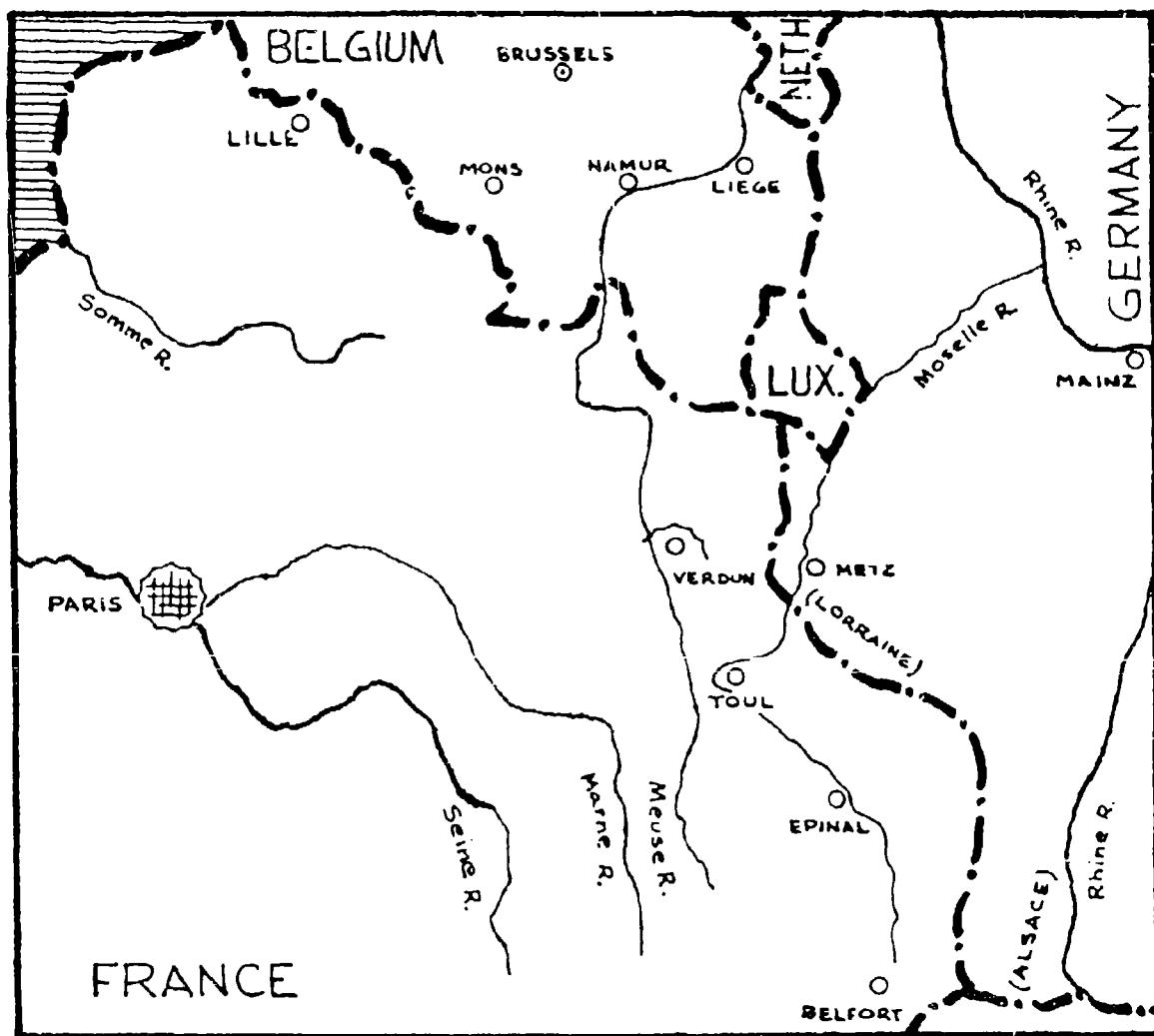


Figure 1. Area of Operations, 1914

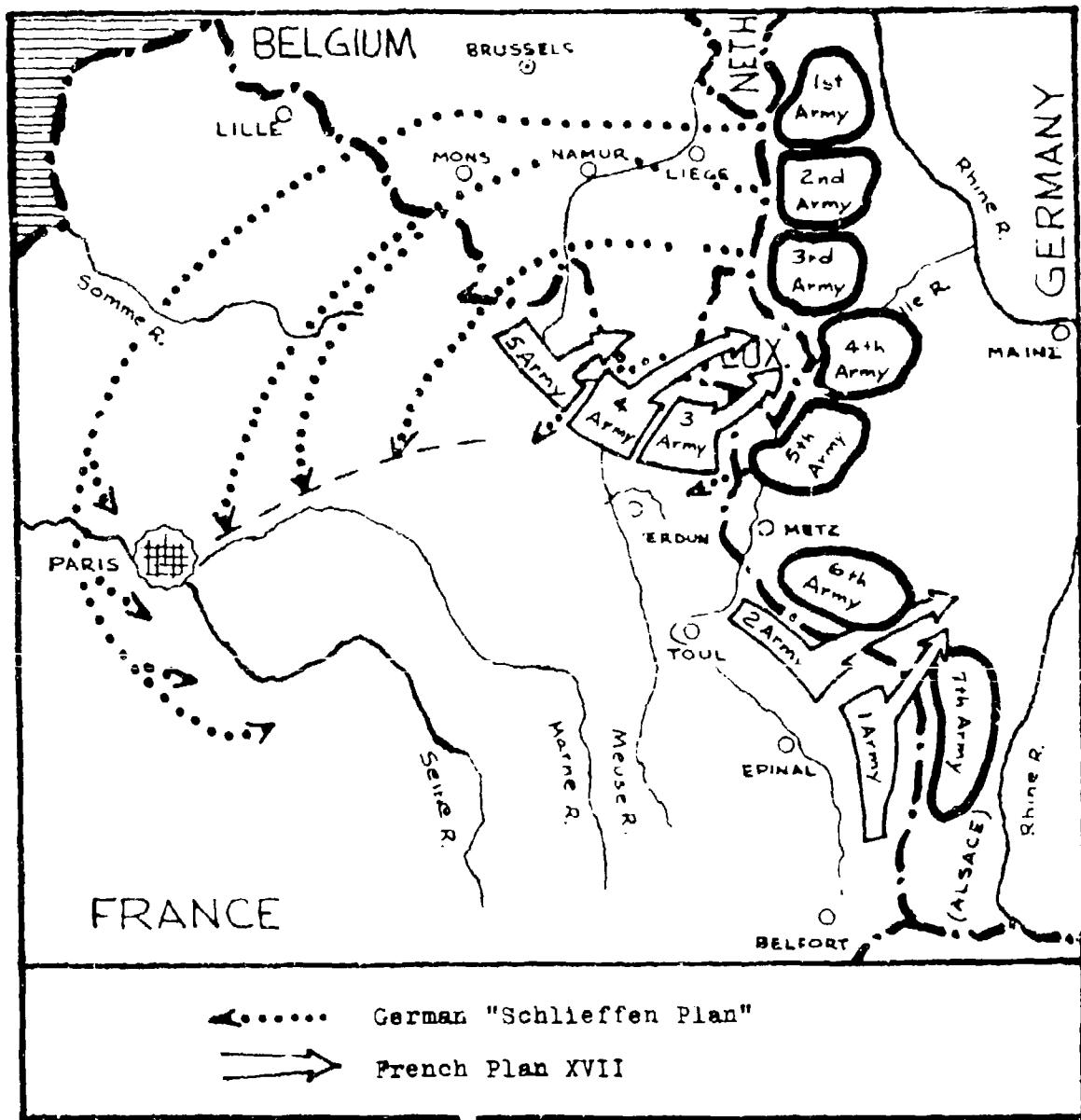


Figure 2. Disposition of Armies, Outbreak of War

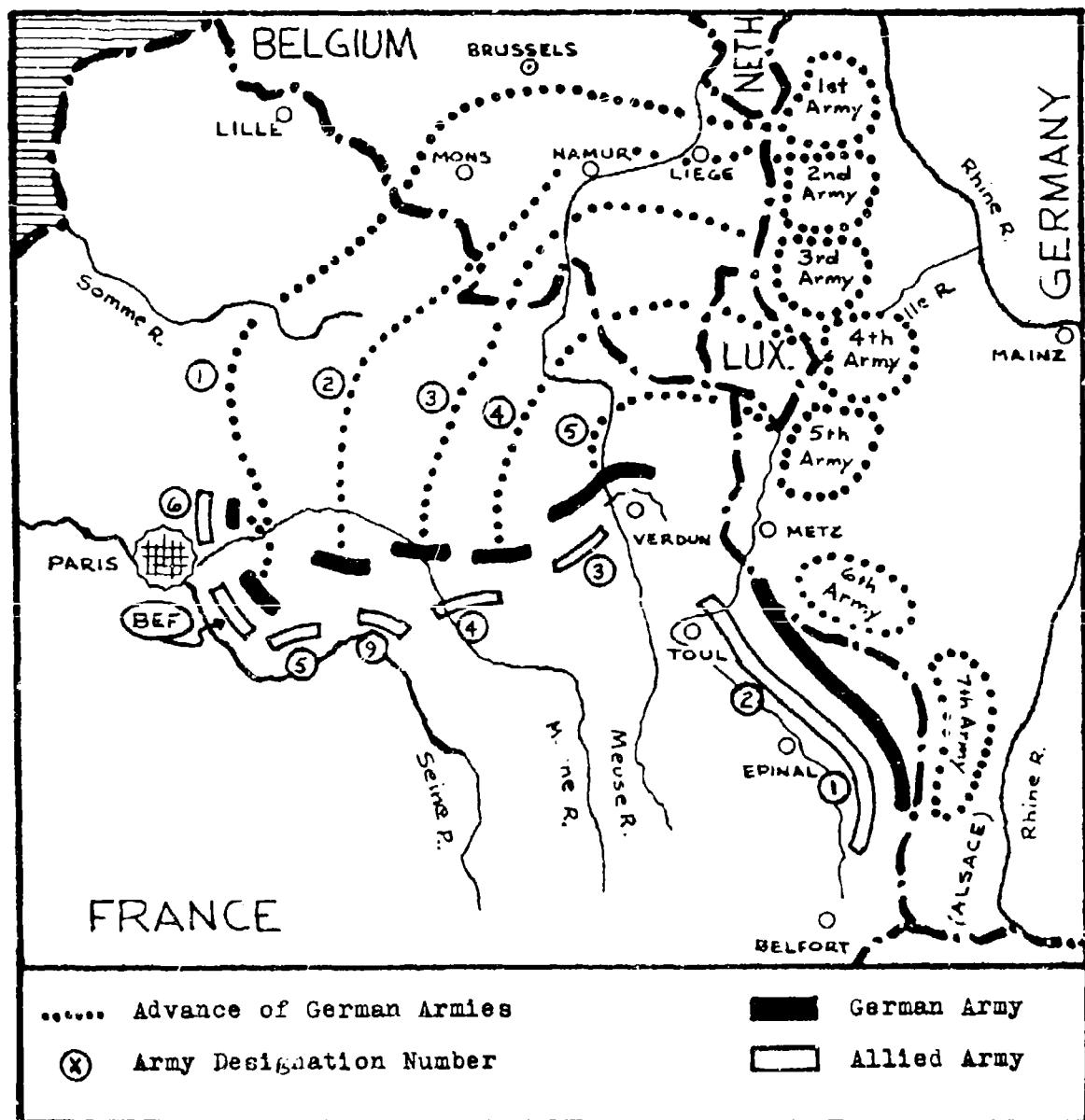


Figure 3. Disposition of Armies, Battle of the Marne

## BIBLIOGRAPHY

### A. REFERENCES CITED

#### Books

1. Colton, Joel. Twentieth Century Alexandria, Va.: Time-Life Books, 1980.
2. Dupuy, T.N. A Genius for War. London: Macdonald and Jane's, 1977.
3. Liddell Hart, B.H. Strategy--The Indirect Approach. New York: Praeger Inc., 1954.
4. Ritter, Gerhard. The Schlieffen Plan. New York: Praeger Inc., 1958.
5. Tuchman, Barbara W. The Guns of August. New York: Macmillan, 1962 (Bantam Edition, 1976)
6. Van Creveld, Martin. Supplying War. Cambridge University Press, 1977.

#### Articles and Periodicals

7. Flammer, P.M. "The Schlieffen Plan and Plan XVII: A Short Critique," Military Affairs, Vol. 30 (Winter 66-67): pp 207-212.
8. Sien-Chong, Niu. "Lesson of the Schlieffen Plan," Military Review, Vol. 47 (Oct 67): pp 83-90.

#### Official Documents

9. U.S. Department of the Air Force. United States Air Force Basic Doctrine AF Manual 1-1. Washington D.C.: Government Printing Office, 1983 draft.

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## CONTINUED

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### B. RELATED SOURCES

#### Books

Clausewitz, General Carl von. On War. Washington D.C.: Infantry Journal Press, 1950.

Goerlitz, Walter. History of the German General Staff. New York: Praeger Inc., 1936.

Goodspeed, D.J. The German Wars 1914-1945. Boston: Mifflin Co., 1977

Kithchen, Martin. Military History of Germany. Indiana University Press, 1975

Kluck, General Alexander von. The March on Paris and Battle of the Marne, 1914. New York: Longmans, 1920.

Rupprecht, Crown Prince of Bavaria. Mein Kriegstagebuch. Munich: Deutscher National Verlag, 1929.

Schlieffen, General Fieldmarshal Count Alfred von. Cannae. Fort Leavenworth: Command and General Staff School Press, 1936.